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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
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|------------|------------|--------------------|----------|------|
| 09/763,034 | 02/15/2001 | Yoshihiro Ishikawa | 3815-116 | 1987 |
|------------|------------|--------------------|----------|------|

22913 7590 08/18/2006

WORKMAN NYDEGGER  
(F/K/A WORKMAN NYDEGGER & SEELEY)  
60 EAST SOUTH TEMPLE  
1000 EAGLE GATE TOWER  
SALT LAKE CITY, UT 84111

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| EXAMINER |
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SAM, PHIRIN

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2616

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>09/763,034 | <b>Applicant(s)</b><br>ISHIKAWA ET AL. |  |
|                              | <b>Examiner</b><br>Phirin Sam        | <b>Art Unit</b><br>2616                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 21-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 and 33 is/are allowed.
- 6) ☒ Claim(s) 21,23-29,31 and 32 is/are rejected.
- 7) ☒ Claim(s) 30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

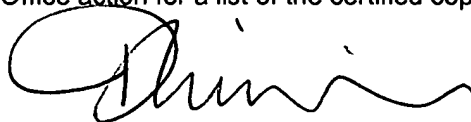
#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



**PHIRIN SAM  
PRIMARY EXAMINER**

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 24, 25, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,246,673 (hereinafter referred as “Tiedemann, Jr.).

**Regarding amended claims 24, 25, and 29**, Tiedemann, Jr. discloses a cell search method mobile station comprising:

- (a) a receiving step of receiving, from a base station, phase difference information between a long period spreading code of a common control channel of said base station and a long period spreading code of a common control channel of a neighboring base station of said base station (see Figs. 1a, 2, and 3, col. 10, lines 15-44);
- (b) a cell search step of carrying out cell search in accordance with the received phase difference information (see Figs. 1a, 2, and 3, col. 10, lines 9-14).

3. Claims 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 6,546,064 (hereinafter referred as “Hayashi”).

**Regarding claims 26-28**, Hayashi discloses a base station comprising:

- (a) storing means for storing phase difference information between a long period spreading code of a common control channel of said base station and a long period spreading code of a

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common control channel of a neighboring base station of said base station, the phase difference information being captured from a mobile station (see Fig. 1, element 7, col. 7, lines 10-30);

(b) management means for managing the phase difference information stored in said storing means (see Fig. 1, element 8, col. 7, lines 31-50).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 21 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,259,683 (hereinafter referred as "Sekine") in view of US Patent 6,167,037 (hereinafter referred as "Higuchi").

**Regarding claims 21 and 23,** Sekine discloses an information management method for cell search in a mobile communications system comprising:

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- (a) a capturing step of capturing, in a handover-source base station, phase difference information between a long period spreading code of a common control channel from said handover-source base station and a long period spreading code of a common control channel from a handover-destination base station, the phase difference information being calculated by at least one mobile station that is communicating with said handover-source base station (see Fig. 4, col. 6, lines 64-67, col. 7, lines 1-18);
- (b) a storing step of storing, in said handover- source base station and/or its control station, the captured phase difference information (see Fig.
- (c) a transmitting step of transmitting the stored phase difference information to a mobile station (see Fig. 1, abstract).

Sekine does not disclose a storing step of storing, in said handover- source base station and/or its control station, the captured phase difference information. However, Higuchi discloses the storing step of storing, in said handover- source base station and/or its control station, the captured phase difference information (see Figs. 19a and 19b, col. 20, lines 27-30). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the storing the captured phase difference information teaching by Higuchi with Sekine. The motivation for doing so would have been to provide to achieve fast, highly accurate acquisition in a mobile communication read on column 3, lines 63-64. Therefore, it would have been obvious to combine Higuchi and Sekine to obtain the invention as specified in the claims 21 and 23.

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7. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,546,064 (hereinafter referred as “Hayashi”) in view of US Patent 5,953,326 (hereinafter referred as “Nakamura”).

**Regarding claims 31 and 32**, Hayashi discloses a mobile communications system including a base station and a mobile station,

said base station comprising:

- (a) base station storing means for storing phase difference information between a long period spreading code of a common control channel of said base station and a long period spreading code of a common control channel of a neighboring base station of said base station, the phase difference information being captured from said mobile station (see Fig. 1, element 7, col. 7, lines 10-30);
- (b) management means for managing the phase difference information stored in said storing means (see Fig. 1, element 8, col. 7, lines 31-50).

Hayashi does not disclose mobile station storing means for storing the phase difference information captured from said base station and cell search means for carrying out cell search in accordance with the phase difference information stored in said mobile station storing means. However, Nakamura discloses mobile station storing means for storing the phase difference information captured from said base station and cell search means for carrying out cell search in accordance with the phase difference information stored in said mobile station storing means (see Fig. 7, element 36, field of the invention, summary of the invention, col. 8, lines 43-58, and col. 9, lines 51-64). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine mobile station storing means and cell search means teaching

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by Nakamura with Hayashi. The motivation for doing so would have been to provide a cell selection scheme which is capable of shortening the cell selection processing time read on column 3, lines 59-62. Therefore, it would have been obvious to combine Nakamura and Hayashi to obtain the invention as specified in the claims 31 and 32.

***Allowable Subject Matter***

8. Claim 30 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. Claims 22 and 33 are allowed.

***Response to Arguments***

10. Applicant's arguments with respect to claims 21, 23, and 24 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phirin Sam whose telephone number is (571) 272-3082. The examiner can normally be reached on a compress schedule, from 8:00-5:30, first Wed off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571) 272 - 3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Respectfully submitted,

Date: August 16, 2006

A handwritten signature in black ink, appearing to read 'Phirin Sam', written over a horizontal line.

**PHIRIN SAM  
PRIMARY EXAMINER**